

Issues Discussed 11/2/16

1. **Statistics for the non-fill areas.** We do not have technical concerns at this point with their background statistical approach if it is applied to non-fill area.
2. **GW-SW Interface to Quarry Pond.** We confirm that the PRP's either need to demonstrate that the groundwater plume does not reach the Quarry Pond, or they need to collect pore water as part of the assessment of the Quarry Pond. The collection of surface water and/or sediment is not sufficient to assess the potential impact to benthic organisms.
3. **Great Miami River** – We confirm that the investigation of the river should be completed regardless of the floodplain investigation. Current floodplain results do not allow for an evaluation of historical impacts to the river.
4. **OEPA Comment 15 - Gas Emissions from Landfills.** The landfill gas monitoring is required based on the details of the previous remedy. ARAR information and citations with substantive requirements quoted in the attached “citations” Word document, with the requirements for monitoring locations of the monitoring system for this type of landfill are highlighted in yellow. Note that the type of landfill plays a role here. These are the requirements for a landfill where disposal occurred after July 1, 1970 but before June 1, 1994. If disposal occurred after 1994 the monitoring is different and may be where the state is confused. These highlights are from paragraph OAC 3745-27-12(D)(5)(a)(ii).
5. **OEPA Comment 55: Comparing All Soil Results to Soil Leaching Values** – We do not understand the rationale for this comment. If groundwater has been sampled for all constituents and source locations are not in question, what is the value of comparing soil data to soil leaching in all cases? If groundwater monitoring locations are adequately spaced and the data demonstrates that any leaching which may be occurring is not resulting in concentrations above applicable screening levels, what would be done with the soil leaching comparison?
6. **Cumulative Pathway Risk Assessment** – For any given receptor (e.g. trespasser, onsite worker, etc.), multiple chemicals in multiple media are evaluated in the human health risk assessment. For example, a trespasser could be evaluated for exposure to direct contact soils and water ingestion from a surface water body. The effects of multiple chemicals are additive for each target organ. A total risk of all organs combined can be provided; however, risk decisions are made based only on the risk to individual organs.

If there is reason to believe that a site has a receptor that falls under multiple scenarios (e.g. Trespasser and a Site Worker both), a risk assessment can be made which combines the elements from both scenarios.

Additional Groundwater Investigation Questions

- a) The locations where NAPL is observed does not consistently align with the groundwater plumes provided in the work plan. Has the NAPL been characterized? If not, please collect soil samples from zones where the NAPL is observed to determine the chemical nature and the potential for leaching into groundwater.
- b) The vinyl chloride plume map shows a lobe around BH43-13, BH39-13, and BH31-13 which is unbounded to the south. There is another lobe around BH42-13 and MW-228 which is unbound to the west. Will samples be collected between these two lobes to see if they are connected? This is north of the asphalt pile where there should be fewer restrictions due to Valley Asphalt infrastructure.
- c) For locations where groundwater plumes extend to the property boundary, what is the plan for delineating those plumes?
 - a. For example, the proposed borings in the MW-210 area likely will not complete delineation of those impacts to the south.
 - b. Will monitoring wells be installed east of BH70-13?
 - c. NAPL was observed in BH50-13 but there are no locations east of that where it could interact with utility conduits along Dryden Road. Will samples be collected east of BH50-13?